Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
	)	
Forward-Looking Mechanism for High Support for Non-Rural LECs	)	CC Docket No. 97-160
	)	
	)	
December 1, 1998, Workshop on Input Values for Switching Investment and Corporate and Customer Operations Expenses	)	

COMMENTS OF AMERITECH

Ameritech[1] submits these comments on the Common Carrier Bureau's ("Bureau's") December 1, 1998, workshop on cost model input values for switching investment and corporate and customer operations expenses.

On November 25, 1998, the Bureau released an announcement[2] for three workshops designed to elicit further comment for selecting the input values to be used in the forward-looking cost model for non-rural carriers that the Commission adopted in its *Platform Order*.[3] The Bureau reasoned that with the selection of the platform interested parties could focus their

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[1] Ameritech means: Illinois Bell Telephone Company, Indiana Bell Telephone Company, Incorporated, Michigan Bell Telephone Company, The Ohio Bell Telephone Company, and Wisconsin Bell, Inc.

[2] "Common Carrier Bureau to Hold Three Workshops on Input Values to Be Used to Estimate Forward-Looking Economic Costs for Purposes of Universal Service Support," CC Docket Nos. 96-45 and 97-160, DA 98-2406 (rel. November 25, 1998).

attention and resources on determining recommended values for the particular inputs to be used in the model platform.

In order to facilitate the workshops and permit interested parties to undertake any analysis or commentary before, during, and after individual workshops, the Bureau established specific topics to be explored at each workshop. Also, the Bureau staff stated that they would rely upon the existing record to develop preliminary values for the platform inputs. Prior to each workshop, the relevant preliminary values for the topics to be covered at that workshop would be posted at the Bureau's Web site. At each workshop, the Commission staff would describe the methodology used to develop the preliminary values reported at the Web site. The first of these workshops was held on December 1, 1998 at the Commission's offices. The morning portion of the workshop focused on switching inputs, while the afternoon session was devoted to corporate and customer operations expenses. Ameritech obtained the Bureau staff's preliminary inputs for this first session prior to the workshop.

I. SWITCHING INVESTMENT.

At the December 1 workshop, the Bureau staff presented the methodology used to develop the preliminary values for digital switching investments primarily based on the data examined in the Gabel-Kennedy study.[4] The Bureau staff explained that adjustments were made to the Gabel-Kennedy data in order to combine Rural Utilities Service (RUS) data[5] with digital

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[3] Federal-State Joint Board on Universal Service, *Fifth Report and Order*, CC Docket Nos. 96-45 and 97-160, FCC 98-279 (rel. October 28, 1998) (*Platform Order*).

[4] David Gabel and Scott Kennedy, "Estimating the Cost of Switching and Cables Based on Publicly Available Data," The National Regulatory Research Institute, NRRI 98-09,April 1998.

[5] See Gabel–Kennedy, pp. 93-101, for a discussion of the RUS data.

switching data extracted from depreciation rate studies of large LECs.[6] Specifically, it is Ameritech's understanding that the Bureau staff relied only on data involving the acquisition of new switches. In addition, rather than use the Turner Price Indexes as used in the Gabel-Kennedy study, the Bureau staff used chain-type GDP price index. Finally, the staff described various regression analyses used to develop the preliminary input ranges for investments of digital host and remote switches. Based on the discussion at the workshop, it appears that the staff has not yet examined the switch investment information that was included in the eleven state-sponsored studies submitted to the Commission by the May 26, 1998, deadline.[7] Ameritech would expected that the Commission would examine and use switch investment information as well as other information submitted in these state-sponsored cost studies in developing final inputs for the platform model.

The Bureau staff's general approach to use regression analysis is a plausible method to estimate the average investments for digital switches. While Ameritech has neither duplicated nor extended the analysis made by the staff, there are several specific areas with which Ameritech has special concern and which should be adequately analyzed before the Commission establishes final input values for digital switching investments: first, the restriction of the analysis to purchases of new switches significantly understates the investment required by Ameritech to acquire digital switches; second, the use of the chain-type gross domestic product

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[6] "Spreadsheet of Digital Switching Data from Depreciation Rate Studies Available," CC Docket Nos. 96-45 and 97-160, DA 97-1663 (rel. August 4, 1997). Gabel and Kennedy also made some modifications to the FCC data set to correct apparent errors. See Gabel–Kennedy at p. 108. Most of these adjustments appear reasonable; however, a complete evaluation of the Gabel–Kennedy adjustments and corrections has not been made by Ameritech.

[7] See "State Forward-Looking Cost Studies for Federal Universal Service Support," CC Docket Nos. 96-45 and 97-160, DA 98-217 (rel. February 27, 1998) and the Bureau's time-extension order, CC Docket Nos. 96-45 and 97-160, DA 98-788 (rel. April 23, 1998) for a description of the Commission's filing requirements for the state-sponsored submissions.

(GDP) price index is a crude, and potentially inappropriate, method for converting switching investments across time; finally, factors beyond those currently examined by the staff have not yet been explored.

Last year, the Bureau issued its *Universal Service Data Request* that required, in part, that large LECs submit their contracts with switching manufacturers.[8] Ameritech submitted its existing switch contracts and, consistent with 47 C.F.R. 0.459 as well as paragraph 8 of the *Universal Service Data Request,* requested the confidential treatment of these contracts. These contracts specify the prices that Ameritech will pay for switch replacements as well as prices for upgrading or expanding existing switches. It is an undeniable fact that the negotiated prices for switch replacements and for additions or upgrades are significantly different and were jointly decided. Only a meld of such prices could reasonably reflect the average price for a switch for which no additional investments were to be made. That is, the prices for switches that are envisioned as a single payment with no additional growth or upgrades must reflect the full commitments and expectations underlying the contracts a carrier has made with its switching vendors. Ameritech's switching vendors would not have agreed to the prices for switch replacements were it not for their expectation that they would make sales for growth and upgrades. While Ameritech does not have specific knowledge of the terms and prices facing other large LECs, Ameritech understands that such relationships are an industry norm. Consequently, the development of switch inputs for the model platform cannot reasonably be based only on the prices paid for initial switch placement. Some recognition of the growth and

[8] Federal-State Joint Board on Universal Service, *Order*, CC Docket No. 96-45, DA 97-1433 (rel. July 9, 1997) (*Universal Service Data Request*).

upgrade dimension of such switch contracts must be taken into account for developing the switch investment inputs for the model platform.[9]

Because the data used by the staff spans more than a decade, some recognition must be made to reflect changes in the prices of switches over time. The Gabel–Kennedy study used the Turner COE price index for the South Atlantic region, while the Bureau staff relied on the chain-type GDP price index in its preliminary analysis. The Turner index as used in the Gabel-Kennedy study has generally decreased from 1986 to 1996. However, the GDP index has generally increased over the same period. At a simple level, the GDP index moves opposite the generally accepted pattern of switch prices, while the Turner index is generally consistent with it.[10] Ameritech also compared these indexes with the proprietary COE price index that Ameritech uses in identical circumstances. The Ameritech index followed the same general pattern as the Turner index. While the GDP index and the Turner index are highly correlated,[11] the time pattern of the GDP index makes it an undesirable choice. If the choice were restricted to using either the GDP index or the Turner index, the Turner index would be a significantly better choice. The staff may wish to consider other price indexes such as the chain-type Producers Durable Equipment price index. Unfortunately, this index still increases over the data

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[9] During the workshop Dr. Gabel indicated that the Gabel–Kennedy study investigated a comparable issue for RUS companies making competitive bid purchases versus negotiated bid purchases. See pp. 101-105. While Ameritech understood that Gabel claimed during the workshop that there was no significant difference between the results in their Tables 3-4 and 3-5, such a result is not specifically reported in this section of his study. In addition, the circumstances investigated in the Gabel-Kennedy study do not reflect the joint determination of prices for switch replacements and upgrades, as Ameritech's contracts exhibit. There is a material difference in prices at the time of replacement versus at other times or circumstances in Ameritech's switching contracts.

[10] The simple notion is that forward-looking switches are specialized digital computers. Since digital computer prices are generally understood to have decreased over the past twenty years, digital switching may be expected to follow the same general pattern.

[11] The correlation between the Turner COE price index data found in the Gabel–Kennedy study and the GDP index, produced by the Bureau of Economic Analysis (BEA) as found at http://www.bea.doc.gov, is -0.9725.

period, although not as pronounced as the GDP index. An index that reflects the historical pattern of prices for Computer and Office Equipment, Standard Industrial Classification (SIC) Industry Group No. 357, or Electronic Computers, SIC Industry No. 3571 may provide a more adequate index to be used by the staff rather than the GDP index.

Finally, because the staff has excluded explicit recognition of study areas, individual companies, and states in their preliminary regression analysis, no identification of the importance of transportation costs and state taxes on the purchase of switching equipment has been made. Either these factors should be explicitly recognized in developing separate factors for different geographic areas, or analysis should show that these factors are not significant in any region. In addition, because the large LEC data used by the staff does not reflect all large LECs nor all states, Ameritech intends to work with the Bureau staff so that Ameritech's data submitted in response to the *Universal Service Data Request* can be used to extend the staff's analysis.

II. CORPORATE AND CUSTOMER OPERATIONS EXPENSES.

In the afternoon session, the staff presented the methodology underlying the preliminary ranges for corporate and customer operations expenses. Unlike the switch investment methodology presented in the morning session, the staff's analysis did not begin with data obtained from any analysis submitted in this proceeding. Rather the staff relied primarily on existing public information. First, the staff obtained subject-to-separations expense information for 1996 by study area from ARMIS reports for Marketing Expenses (Account 6610), Service Expenses (Account 6620), Executive and Planning Expenses (Account 6710), General and Administrative Expenses (Account 6720), Other Plant, Property, and Equipment Expenses (Account 6510), and Network Operations Expenses (Account 6530). Next, output volumes for switched and special lines were obtained from the ARMIS 43-08 report. The staff also explored

the use of line counts from information provided in the *Universal Service Data Request*. Finally, usage volumes were based on toll dial-equipment minutes (DEMs) as publicly reported by NECA to the FCC. Because of statistical concerns regarding multicollinearity, the staff's preliminary analyses were based on regressing expenses per line on various output variables stated on a per line basis.

While Ameritech has duplicated most of the preliminary regression analyses as reported by the Bureau staff, Ameritech believes that the current analysis needs to be significantly augmented before the platform inputs for corporate and customer operations expenses can reasonably be determined. First, the use of study area data is inappropriate if economic cost for supported services is to be identified. Second, some of these expenses either should be incorporated into maintenance expense inputs because they are more closely related to investments, or should be excluded because they do not relate to supported services. Third, if the staff's regression approach is pursued, then additional explanatory variables should be explored. Next, it would be unreasonable to exclude all marketing expenses from the model inputs. Finally, the determination of the model inputs derived from these preliminary regression analyses should be slightly revised.

The Bureau staff used study areas as the basic organizational unit for its preliminary analyses. While the output information used by the staff reflects each study area, the expenses specifically found in Accounts 6610, 6710, and 6720 for each study area are substantially determined by accounting allocation rules that assign company expenses to individual study areas rather than the output levels or activities in these study areas. Consequently, the preliminary regressions for at least these accounts are undoubtedly spurious. Hence, if the Commission's intent is to develop causally-based costs, the staff should aggregate expense

observations to the company level. Because many observations are eliminated by this aggregation, the staff ought to examine as much data as possible to expand the merged data. For example, ARMIS and NECA DEM data are available from 1991 to 1996 for the variables examined by the staff. If, however, the intent is to develop forward-looking accounting costs rather than economic costs, then aggregation would not be necessary, and the Commission should explicitly indicate that the costs under such a determination reflect study area accounting allocations rather than economic costs.

Ameritech's general review of the expenses included in these accounts leads Ameritech to conclude that certain portions of these expenses are not caused by the provision of supported services. In particular, portions of Account 6620 should not be included in the development of customer operations expense inputs. Since supported services include access to, but not usage, of operator services,[12] the expenses for Call Completion Services (Account 6621) are not generally appropriate to include in the development of inputs for the platform model. In addition, some portions of the expenses for Customer Services (Account 6623) are not caused by the provision of supported services. Specifically, this account includes payphone commissions, IXC billing inquiry, and coin collection and administration, which are not needed to provide supported services. Consequently, these expenses should also be removed in developing the applicable expense inputs.

Ameritech has historically handled other portions of corporate and customer expenses differently from the preliminary analysis pursued by the Bureau staff. First, Power Expense (Account 6531) and Testing Expense (Account 6533) are more appropriately included in

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[12] Federal-State Joint Board on Universal Service, *Report and Order*, CC Docket No. 96-45,(rel May 8, 1997) (*Universal Service Order*), as corrected by Federal-State Joint Board on Universal Service, *Errata*, CC Docket No. 96-45, FCC 97-157 (rel. June 4, 1997), Para. 56. Also, see §54.101 of the Commission's Rules.

maintenance inputs for the platform. The specific methodology and development of maintenance expense factors that include power and testing expenses has been recently provided to the Commission subject to the *Protective Order*.[13] Second, the output variables used in the preliminary analysis do not adequately reflect the activity drivers that underlie the remaining portion of Customer Services Expenses. In particular, the service order processing expenses are primarily driven by inward movement, and customer billing and collection expenses are driven more by customer accounts than lines. Consequently, Ameritech suggests that the Bureau staff should separately examine Customer Services Expenses using a wider array of activity levels than currently are used in its preliminary analysis. The purpose of such extension is to make adequate distinctions between the cost of providing support services versus the cost of other services. Finally, the staff should consider a labor price variable which reflects differences in the basic input price for different study areas underlying corporate and customer expenses.

The Bureau explicitly solicited comments from interested parties during the afternoon session about the appropriateness of including any marketing expenses at all for the model inputs. Ameritech was taken aback by the introduction of this issue. First, the Commission clearly stated that eligible carriers must advertise the availability of supported services throughout their service areas.[14] Therefore, the exclusion of all marketing expenses would be inconsistent with this determination. Second, product management activities are necessary for any offered service. Finally, sales expenses are currently incurred for single-line business customers and are expected to increase as competition increases in business and residential

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[13] *Protective Order*, CC Docket Nos. 96-45 and 97-160, DA 98-1490 (rel. July 27, 1998).

[14] *Universal Service Order*, Para. 24.

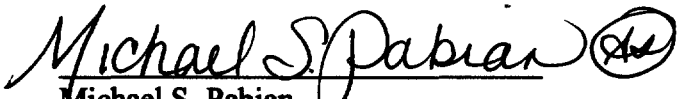
markets.[15] Consequently, not only should marketing expenses be included in the development of inputs for the platform, all three components of Account 6610 should be reflected in such a development.

Finally, Ameritech suggests that the staff reexamine its interpretation of the values to be used as inputs for the platform, if the same basic functional form is adopted in the final analysis of these expenses. In particular, the Bureau staff has used the coefficient for the "percentage switched lines" as an estimate of the average expense per line to be included in the platform. This interpretation appears to be a marginal evaluation; however, a total output evaluation is required for the model. For example, the preliminary value for this coefficient in the first specification of Account 6610 was 7.1876 on an annual basis or 0.60 when stated on a monthly basis. Hence, the staff concluded that $0.60 per line per month was their preliminary estimate for the upper range for the monthly average marketing expense input. However, this estimate of average marketing expenses does not take total switched lines and total lines into consideration, as this particular specification permits. Hence, if 90% of total lines are switched lines, *i.e.*, lines that generally provide supported services, then the model input should be 90% of $0.60 per line or $0.54 per line per month in order to reflect total output. This interpretation, thus, reflects economies of scope between switched and special access lines. Consequently, if the preliminary specification is used in the final version and economies of scope are intended to be reflected in

[15] Businesses with single connections are part of supported services. Additional sales expenses would be appropriate if the Commission were to expand eligible lines to additional residential connections and business with multiple connections. See *Universal Service Order*, Para. 96.

the model inputs, the average expenses per line for each study area should be determined by the product of the "percentage of switched lines" for each study area and its corresponding regression coefficient.

Respectfully submitted,



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